DOCUMENT RESUME

ED 076 916 CG 008 071

AUTHOR Latta, R. Michael; Kahn, Arnold
TITLE Effects of Induced Status on Spacing and Seating Position in a Dyad.
PUB DATE 11 May 73
NOTE 14p.; Paper presented at the annual Midwestern Psychological Association meeting (Chicago, Illinois, May 9-11, 1973)

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Behavioral Science Research; *Behavior Patterns; *Body Language; College Students; *Interpersonal Relationship; *Nonverbal Communication; Social Class; *Social Status
IDENTIFIERS Proxemics

ABSTRACT

The effects of induced status differences on (1) seating position and (2) interpersonal distance from a confederate of a given status level were investigated. Using behavioral measures, induced status differences were found to influence both the amount of interpersonal distance and the quality of space. The results suggest simulation techniques and pencil and paper responses are consistent with behavioral measures. (Author)

ED 076916

Effects of Induced Status on Spacing and Seating Position in a Dyad

R. Michael Latta and Arnold Kahn

Iowa State University

Abstract

The effects of induced status differences on (1) seating position and (2) interpersonal distance from a confederate of a given status level were investigated. Using behavioral measures, induced status differences were found to influence both the amount of interpersonal distance and the quality of space. The results suggest simulation techniques and pencil and paper responses are consistent with behavioral measures.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPPO DUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN ATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRE SENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CG 008 071

This paper was presented at the annual
Midwestern Psychological Association meetings.
Chicago, Illinois, May 11, 1973.

FILMED FROM BEST AVAILABLE COPY

Both Mehrabian (1968) and Hall (1959) have indicated a class of variables, proxemics, which are involved in nonverbal communication. Examples are posture, eye contact, body orientation, seating position and distance maintained between individuals. An observer may decode any one, or combination, of these encoding variables such that he can make a number of inferences about the relationships among persons present in the situation. For example, a large distance between two individuals implies negative affect (Argyle and Dean, 1965; Mehrabian and Diamond, 1971), an impersonal situation (Kleck, 1969), and unfriendliness (Russo, 1967).

The majority of studies in this area use simulations, role playing, and/or paper and pencil techniques. The subject is asked to indicate a position he would assume relative to another which would communicate unfriendliness etc. to the other, or to indicate on a questionnaire what another person was communicating by the position he assumed. For example, Russo (1967) had subjects rate various arrangements of individuals at a rectangular table along four dimensions; intimate-unacquainted, hostile-friendly, talkative-untalkative, and psychologically equal-unequal. She found that increased distance implied less friendliness and acquaintance, and that if one person sat at the head of a table, the relationship was seen as less psychologically equal than if both were at the ends or sides. A diagonal arrangement of seating positions was perceived as more psychologically distant than two people sitting at the head and foot, even though the actual physical distance was greater in the latter arrangement.

Among the relationships that both distance and seating position at a rectangular table communicate is the relative status among persons in close proximity. Pellegrini (1971) has reported that status is conferred on those seated at the head of the table, and De Long (1970) has demonstrated that ratings of one's perceived status by other members of a 13 person group are influenced by where

one sits at a rectangular table. Lott and Sommer (1967) suggest that individuals tend to maintain greater distance between themselves and persons of both higher and lower status than between themselves and peers. These three studies all involved simulation techniques with pencil and paper methods, and in no case was subjects' actual seating position used as a dependent measure.

There are obvious problems with simulation techniques and paper and pencil methods employed in the studies reported thus far (e.g., low external validity; Campbell, 1957). This type of procedure may not reflect those variables which influence a person's actual behavior in social situations (La Piere, 1934; Kuntner, et al., 1952; Mischel, 1968). The present study was undertaken to determine if induced status differences effect actual spacing in a dyad.

Based on the questionnaire results relating distance to status discrepancy (Lott and Sommer, 1967), it was hypothesized that the more discrepant a subject's status in relation to that of a confederate, the greater the distance the subject would maintain from the confederate. Thus, a confederate of the same status as the subject should provide a base line of shortest distances. A second set of hypotheses were based on the reported findings relating status to simulated seating positions at a rectangular table (De Long, 1970; Pellegrini, 1971: Russo, 1967). With status discrepancy implying psychological unequality in the relationship, it was hypothesized that subjects faced with a confederate of higher status than themselves would tend to sit at the table diagonally across from the confederate in the seating position associated with maximum psychological distance; that subjects faced with a confederate of lower status than themselves would tend to sit at the head of the table in the position associated with greatest power; and that subjects faced with a peer confederate would tend to sit at the positions along either side of the table.

Method

Overview

When the subject arrived, the status ascription was made by identifying the confederate. The subject was then directed to enter the experimental room and pull up a chair to the table where the confederate was seated. To strengthen the status manipulation, each confederate dressed appropriately and was found reading a book of corresponding educational level. All confederates were instructed to glance, but not smile at the subject as he entered, and then to continue reading in order to avoid interaction. A tape measure stretched between the closest points of the two chairs was used to record the distance data.

Subjects

Subjects were 31 male General Psychology students who received extra course credit for their participation. Subjects were randomly assigned to conditions: ten to the low status confederate, ten to the peer, and eleven to the high status confederate.

Experimental Room

A diagram of the room used for this study is depicted in Figure 1. The door opened at the right hand corner of the room revealing a rectangular table five feet long and two and one-half feet wide. The longest side faced the wall extending to the left of the doorway. The confederate sat at the end of the long side of the table nearest the door (position C in Figure 1), reading a book. A chair was located at each of three corners of the table, excluding the corner nearest the doorway, approximately fifty inches from the nearest corner of the table. The confederate's chair was ninety inches from chair one, sixty-six inches from chair two, and forty-seven inches from chair three (see Figure 1 for chair identification). The distance from the center of the doorway to chairs one, two, and three was eight, twelve, and eight feet, respectively. Other than the con-

federate's position, there was enough room around the rectangular table for five seating positions from which the subject could choose. If the subject did not move his chair to the table, he was automatically assigned the seating position number "zero."

Insert Figure 1 about here

It was felt that all positions at the table were equally accessible to at least one of the chairs. However, not all chairs were equally accessible from the doorway. Chair three was partially blocked from view by the door itself, and chair two was not easily accessible from the door because of the table blocking the path to it. The result of this situation was that chair one was the most accessible of the three. This situation, however, was not felt to be influential in determining the results.

Procedure

To test the hypotheses, it was necessary to induce a perceived status discrepancy between the subjects and the confederates. Three different confederates from three different status positions were recruited. A psychology professor[1], a first year graduate student[1], and an Ames High School student[1] were employed as confederates in the present study. To be certain that the subjects recognized the status level of the confederate, the confederate was given ascribed status. That is, upon arriving for the study, the subjects were directly told the status level of the confederate they were about to meet. The experimenter then made the following statements to each subject: "Dick Patten, a 101 student who is going to assist me in this experiment, is down the hall in room 304. Why don't you go on down and pull up a chair to the table to wait while I go get the materials for the experiment." These statements were specifically for the peer status condition. Exactly the same wording was used for the other conditions except Dick Patten was identified as an Ames High School student or a psychology

professor in the low and high confederate status conditions, respectively. The first sentence was designed to provide the ascribed status level for the confederate. The second sentence was an explicit direction for the subject to sit at the table.

The subject had no method of determining the actual truth or falsity of the status level ascribed to the confederate. To strengthen the manipulation of ascribed status, objective cues (such as appropriate dress) associated with each status level were made visible to the subjects. In the low status condition, the confederate was reading a fiction paperback book. Similarly, in the peer condition a Psychology 101 textbook was lying on the table near the confederate. Finally, the high status confederate wore a suit and left a class list lying conspicuously on the table.

The confederate's job was to look occupied and not give off any interpersonal cues such as smiling, frowning, or talking to the subject in order to not influence the subject's choice of a seating position by creating an impression of approachability. Consequently, the confederate was instructed to look the subject in the eye for one or two seconds when the subject arrived, merely to indicate awareness of the subject's presence. No other verbal or nonverbal cues were present. After glancing at the subject, the confederate looked back down to his book and continued to read in order to avoid any further interaction.

While the subject was going to room 304 and positioning his chair, the experimenter obtained a tape measure, data record sheets, and a questionnaire which included the following questions: "Do you suspect anything about the procedure of the experiment up to now? If so, would you explain?" After giving the subject time to position his chair, the experimenter went to room 304 and collected the data.

Dependent Measures

Two different dependent measures were taken for each of the three status

conditions. The first measure was the distance from the confederate's chair to where the subject placed his chair. The tape measure stretched between the closest points of the two chairs was used to record the distance data. The second measure was the position around the table where the subject seated himself indicated by the numbers 1 through 5 around the table in Figure 1. Before taking the dependent measures, the experimenter administered the questionnaire to assess any knowledge of proxemics on the subject's part which might have influenced the positioning of his chair.

Results

No subject expressed knowledge of or suspicion about the experimental manipulations on the questionnaire. However, one subject in the low confederate status condition knew the confederate personally and one was an Oriental student. The data from these two subjects were not included in the analysis. A Chi-square comparing seating position frequencies by status of the confederate was non-significant ($\underline{X}^2 = 3.12$, $\underline{p} = .5$). This lack of significance was probably due to the characteristic weakness of the Chi-square test when used with small cell frequencies as found in this study. Although significance was lacking, there was a pattern in the seating position results. The proportions of seating positions chosen at a rectangular table as a function of confederate status appear in Table 1. Eight of the ten subjects in the peer status condition, as predicted, chose seats along either side of the table. In the high confederate status condition, six of the eleven subjects did not move their chairs to the table and of the remaining five, three chose the predicted (most psychologically distant) diagonal position. In the low confederate status condition, only two of eight chose the predicted power position, but three chose not to move to the table and the remaining three chose the most psychologically distant seating position. Combining the high and low confederate status conditions into a

single condition of discrepant confederate status, nine of the nineteen subjects in the discrepant confederate status conditions, as compared to two of ten in the peer condition, chose not to move to the table. This indicates that status discrepancy may lead to a hesitation to choose any seating position psychologically or physically close to another of discrepant status.

Insert Table 1 about here

An analysis of variance, computed on the distances between the subjects and confederates, showed as predicted, that subjects maintained less distance with an equal status confederate than with either a high or low status confederate. The mean distances maintained by the subjects were 5.30 feet for high confederate status, 3.75 feet for low confederate status, and 3.04 feet for peer confederate status ($F_{2,26} = 4.15$, $p < .05$). Because the omnibus F-test was close to the significance level, the F Max test for equal treatment variances was performed before proceeding to specific tests of differences between means. F Max was well below significance ($F_{3,10} = 1.70$, $p > .05$). With homogeneous variances, the two planned t-tests were performed on pairs of means. The comparisons done were high versus peer status and low versus peer status. Only one of the comparisons, high versus peer status, was found to be significant at the .05 level ($t_{19} = 2.64$, $p < .05$).

Discussion

The hypotheses tested were: 1) Induced status discrepancy should produce an increase in the distance maintained between individuals; 2) Subjects meeting another person of higher status than themselves should sit diagonally across from that person when at a table; 3) Being confronted with another person of lower status than themselves, should lead subjects to sit at the head of the table, the traditional position of power; and 4) Subjects should sit along either side of a rectangular table where a peer is sitting.

Unfortunately there were no significant differences between groups in seating position chosen at the rectangular table. The large number of possible positions (6) and the small number of subjects (31) probably precluded finding statistically significant differences. Increasing the number of subjects would provide a better test of the seating position hypotheses than that provided by the present study. Although lacking statistical significance, the fact that nine out of nineteen subjects in the discrepant confederate status conditions did not move their chairs to the table when explicitly instructed to do so may indicate an inhibition on their part to place themselves in close proximity with a person of differing status. No similar inhibition was observed in the peer confederate status condition, since eight of the ten subjects in this condition moved their chairs to the table. Being in a situation with a person of differing status produces attempts to maintain appropriate spatial relations: Low status persons avoid the table so as not to infringe on the space of the confederate; high status subjects avoid the table to maintain their space. This line of thought is supported by the observation that six of the remaining ten subjects in the discrepant status conditions chose the seating position of maximal psychological distance when they did move to the table.

The results of the test of the distance hypothesis presented some interesting findings. As predicted, subjects maintained less distance between themselves and confederate of discrepant status. These results are consistent with findings reported by Lott and Sommer (1967) which indicate such a relationship between status and distance using simulated, paper and pencil methods. This replicability of simulated, paper and pencil results with behavioral techniques and experimental methods should encourage other researchers in the field to use the present approach to test relationships between proxemic variables, rather than the simulated, paper and pencil methods which are subject to the criticisms cited earlier.

Although the distances for the high and low confederate status conditions were greater than those for the peer status condition, the difference between the low and peer status conditions was not significant. This was likely due to the subject's perceived status difference with the low status confederate being relatively small. It is possible that the subjects felt the status difference between themselves and a professor to be much greater than the difference between themselves and a high school student. This interpretation is especially appealing when one considers that most subjects were high school students the previous year. A more powerful status manipulation would probably enlarge the perceived status difference in the low confederate status condition and increase the distance maintained.

FOOTNOTES

1. The authors would like to thank Dr. Richard Patten, Gary Holstad, and Bill Salehi for their participation as the high, peer, and low status confederates.

REFERENCES

Argyle, M., & Dean, J. Eye-contact, distance and affiliation. Sociometry, 1965, 28, 289-304.

Campbell, D. T. Factors relevant to the validity of experiments in social settings. Psychological Bulletin, 1957, 54, 297-312.

De Long, A. Seating position and perceived characteristics of members of small groups. Cornell Journal of Social Relations, 1970, 5, 134-151.

Hall, E. T. The silent language. New York: Doubleday, 1959.

Kleck, R. D. Effects of stigmatizing conditions on the use of personal space. Psychological Reports, 1968, 23, 111-118.

Kuntner, B., Wilkins, C., & Yarrow, P. R. Verbal attitudes and overt behavior involving racial prejudice. Journal of Abnormal and Social Psychology, 1952, 47, 649-652.

La Piere, R. T. Attitudes vs. action. Social Forces, 1934, 13, 230-237.

Lott, D. F., & Sommer, R. Seating arrangement and status. Journal of Personality and Social Psychology, 1967, 7, 90-95.

Mehrabian, A. Inference of attitudes from the posture, orientation, and distance of a communicator. Journal of Consulting and Clinical Psychology, 1968, 32, 296-308.

Mehrabian, A., & Diamond, S. G. Seating arrangement and conversation. Sociometry, 1971, 34, 281-290.

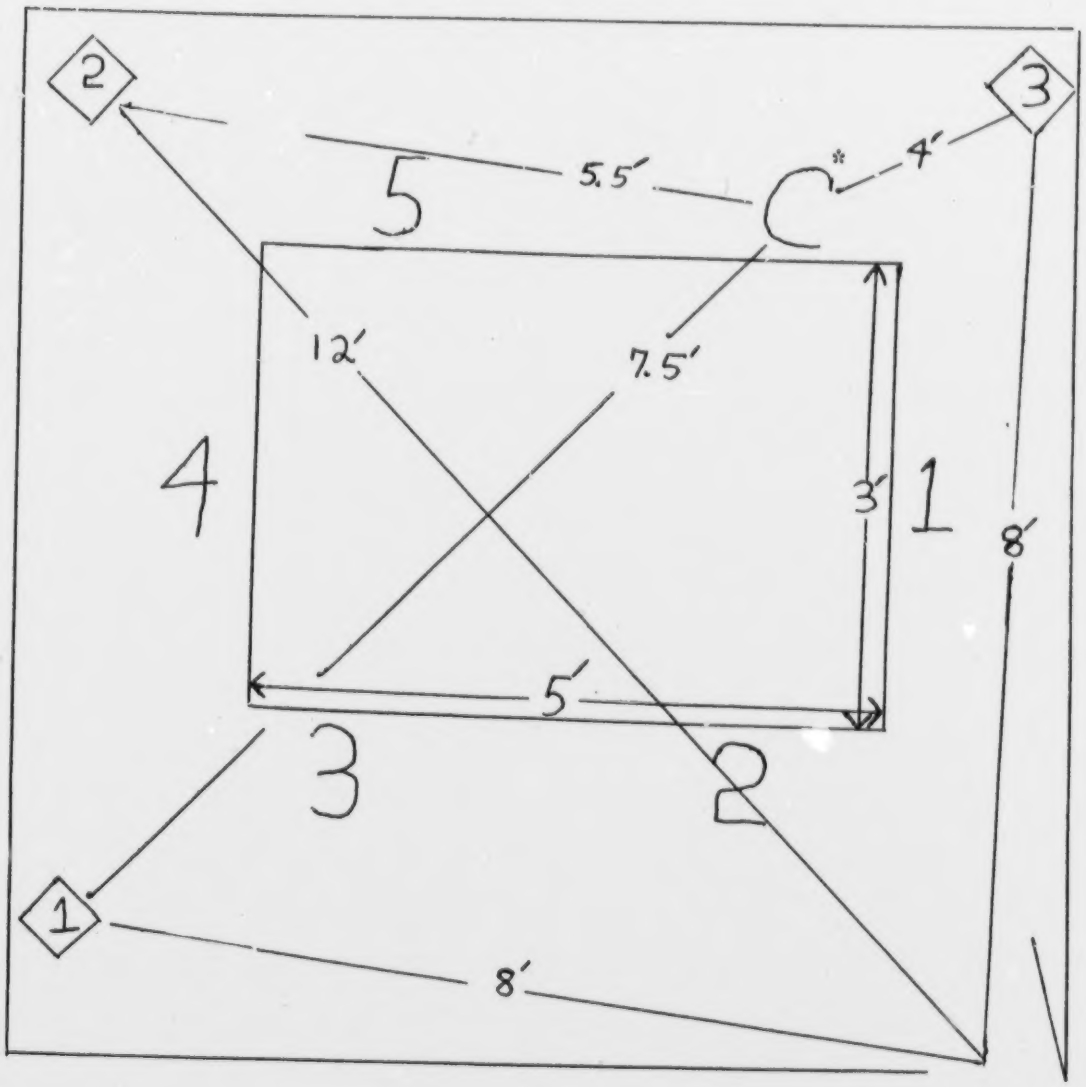
Mischel, W. Personality and assessment. New York: Wiley, 1968.

Pellegrini, J. R. Some effects of seating position on social perception. Psychological Reports, 1971, 28, 887-893.

Russo, N. Connotations of seating arrangements. Cornell Journal of Social Relations II, 1967, 37-44.

Thibaut, J. W., & Kelley, H. H. The social psychology of groups. New York: Wiley, 1959.

Figure 1. Available chairs and seating positions



*C marks the seating position of the confederate for all status conditions

Table 1. Frequency of Seating Positions Chosen at a Rectangular Table as a Function of Confederate Status

		Status Condition			
		Peer	High	Low	
Seating Position[1]	3	6	3	3	18
	0	2	6	3	11
	all others	2	2	2	6

[1]"3" indicates position 3 in Figure 1, diagonal from confederate;
"0" indicates subject did not move his chair to the table;
"all others" indicates positions 1, 2, 4 and 5 in Figure 1.